



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,668	08/27/2005	Kazuaki Nakajima	202064-9001	9812

1131 7590 08/12/2010
MICHAEL BEST & FRIEDRICH LLP
Two Prudential Plaza
180 North Stetson Avenue, Suite 2000
CHICAGO, IL 60601

EXAMINER

WOOLCOCK, MADHU

ART UNIT	PAPER NUMBER
----------	--------------

2451

MAIL DATE	DELIVERY MODE
-----------	---------------

08/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/536,668	Applicant(s) NAKAJIMA, KAZUAKI	
	Examiner MADHU WOOLCOCK	Art Unit 2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to amendment filed on 06/02/2010. Claims 1, 7, 11 and 17 have been amended, claims 13-15 were previously cancelled and claim 16 was previously withdrawn. Claims 1-12 and 17-21 remain pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 11 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the claims have been amended to recite “transmit[ting] [to the first terminal] **only** a detecting script” and “transmit[ing] **only** [said/the] updating information”. This language indicates that the server is limited to the capabilities of solely transmitting the recited data; however, this feature is not supported in the originally filed specification. In fact, paragraphs [0105] and [0106], for example, provide evidence that the push server communicates with and causes the web server, which also transmits the web page on which the detecting and updating scripts are at some point embedded, to transmit the scripts and other elements contained in the control frame and the content frame. Therefore, based on the original

Art Unit: 2451

specification, both the push server and the web server are capable of performing and communicating functions other than **only** transmitting the claimed scripts and data.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Applicant's amendments in response to the previously raised rejections under 35 USC 112, second paragraph, have been considered and obviate previously raised objection; as such those previously raised rejections are hereby withdrawn.

4. Claims 1, 11 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the claims recite "transmit[ting] [to the first terminal] **only** a detecting script" and "transmit[ing] **only** [said/the] updating information". This language indicates that the server is limited to the capabilities of solely transmitting the recited data, however this is contradictory given that the server transmits the detecting script, the updating script and the update information. It is therefore unclear how the server can **only** transmit one of these, when it is claimed to transmit all of these.

Art Unit: 2451

5. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the claims first recite a terminal generating update information which indicates contents of updating to a web page, transmitting the update information to a server and then the terminal updating the web page based on the/said update information which is received from the server. It is therefore implied that the update information received by the terminal resulting in an update to a web page is the same update information transmitted from the terminal indicating the update to the web page which are already made.

6. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the third, fourth and fifth limitation recite "part update information". It is unclear whether these recitations are intended to refer back to the previously recited "a part update information", recited in the second limitation.

7. Claims 11 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the claims are amended to recite "and [to] insert[ing] said detecting script and said updating script into said web page on [each of] said terminals". However, these limitations are directed to a means and a step performed by the server. It is therefore unclear how the processes of the server can

Art Unit: 2451

result in an action on the terminal or if the claim is intended to be interpreted as the server inserting the detecting and updating scripts into the web pages displayed on each of the terminals.

Response to Arguments

8. Applicant's arguments that the server of the claimed invention does not transmit the web page on which the detecting and updating scripts were embedded, nor the page updated by the script because modifying the scripts is performed on the terminals have been fully considered but they are not persuasive.

In response to the arguments, with regards to the claimed server not transmitting the web page on which the detecting and updating scripts were embedded, it is first noted that the specification of the claimed invention recites in paragraphs [0105]-[0106] that the web server does, in fact, transmit the scripts. This web server is the same server which provides usual web services, such as web-pages to be displayed. Further, as discussed about above with regards to the 112 rejections, it is unclear what it intended by the server "only" transmitting the respective scripts. Applicant is urged to distinguish whether this is intended to mean that the scripts are transmitted separately from the web page or if the claimed server is only capable of transmitting the particular script and does not perform any other functionality. With regards to the server not transmitting the page updated by the script because modifying the scripts is performed on the terminals, it is noted that the claim language is silent regarding "modifying the

Art Unit: 2451

scripts” and only claims updating of the web page on the terminal. This is synonymous to Kobayaghi in which the PageCommunicator communicates changes to web page elements detected by the PageController via a NodeManager. Therefore, as in the claimed invention, the server does not transmit the page updated by the script. The rejection is therefore maintained.

9. Applicant's arguments with respect to the applied references not teaching the amended limitations of the independent claims have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1-10, 17, 18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayaghi et al. (US 6,950,852) in view of Ohkado et al. (US 2001/0016873) and in further view of Narin et al. (US 6,691,176).

Regarding claim 1, Kobayaghi teaches a system which enables real-time sharing of a web page being viewed on a plurality of terminals, comprising:

a server provided with a means to transmit (Embedder that embeds in each page a PageManager for controlling pages, column 2 lines 10-11) only a detecting script

Art Unit: 2451

which detects an update to the web page (PageController detects changes in a page element, column 2 lines 16-17) and an updating script which updates the web page (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20) to said plurality of terminals which display said web page (Browser 1 and Browser 2 of FIG. 2); and a means to transmit only update information sent from a prescribed terminal which indicates contents of updating to the web page to another terminal which is displaying the web page that is displayed by said prescribed terminal (A PageController detects local changes to the following elements and remotely communicates them to a corresponding PageController so as to implement synchronization of pages, column 4 lines 6-9); and

terminals each provided with a receiving means to receive the detecting script and the updating script which are sent from said server (a browser loads an HTML page in which a PageManager is embedded, column 6 lines 4-5); a means to cause the received detecting script to detect an update to the web page being displayed and, if any, generate update information which indicates contents of updating and to transmit the update information (PageController detects changes in a page element, communicates them to another machine by way of PageCommunicator, column 2 lines 16-18); and a means to cause the updating script to update the web page based on said update information received from said server (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

However, Kobayaghi-Ohkado do not explicitly disclose inserting said scripts into said web page on each of said terminals.

Narin teaches terminals inserting scripts into a web page on each of said terminals (the script wrapper 197 is provided as a separate file, and thus the browser downloads the set of scripting instructions contained in the script wrapper 197 and incorporates them into the script as if originally embedded in the HTML document, column 13 lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize providing the scripts as a separate file in the system/method of Kobayaghi-Ohkado as suggested by Narin in order to allow script to be written

Art Unit: 2451

without regard to different browser brands. One would be motivated to combine these teachings because a script wrapper increases the efficient use of computing resources.

Regarding claim 2, Kobayaghi teaches the real-time web sharing system as set forth in claim 1, wherein

said server comprises

a means to transmit an update detecting script which detects an update to a part (element) provided on said web page (column 2 lines 14-17), an incorporating script which incorporates this update detecting script into the web page (column 2 lines 10-11), and a part updating script which updates a part provided on the web page (column 2 lines 18-20); and

a means to transmit the part update information which notifies the update to the part provided on the web page, such information being sent from a prescribed terminal, to other terminals which are displaying the same web page as said prescribed terminal (column 4 lines 6-9); and

said terminals each comprises

a means to receive the detecting script and the updating script which are transmitted from said server (column 5 lines 45-50);

a means to cause the incorporating script to incorporate said update detecting script into the web page (column 6 lines 4-5), cause said update detecting script to detect an update to a part on said web page, and to transmit part update information which notifies the content of the update (column 2 lines 16-18); and

Art Unit: 2451

a means to cause said part updating script to update the part provided on the web page based on said received part update information (column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

Regarding claim 3, Kobayaghi teaches the real-time web sharing system as set forth in claim 2, wherein

an update to a part provided on said web page

is a scroll or resize of said web page or an update of a value in the entry form on said web page (column 2 lines 20-23).

Art Unit: 2451

Regarding claim 4, Kobayaghi does not explicitly disclose the real-time web sharing system as set forth in claim 2, wherein said server comprises

a storing means to store identification information, which identifies said terminals individually, in association with the update information and part update information sent from the individual terminals corresponding to the identification information, a means to cause said storing means to store said update information and part update information in association with the identification information of said terminals, a means to, when a prescribed terminal logs in using said identification information, retrieve from said storing means the update information and part update information associated with the same identification information as said login identification information or a means to first transmit said retrieved update information and then transmit said retrieved part update information to said prescribed terminal.

Ohkado teaches wherein said server comprises

a storing means to store identification information, which identifies said terminals individually, in association with the update information and part update information sent from the individual terminals corresponding to the identification information [0117];

a means to cause said storing means to store said update information and part update information in association with the identification information of said terminals [0176];

a means to, when a prescribed terminal logs in using said identification information, retrieve from said storing means the update information and part update

Art Unit: 2451

information associated with the same identification information as said login identification information [0167]; and

a means to first transmit said retrieved update information and then transmit said retrieved part update information to said prescribed terminal [0170].

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an assigned ID in the system/method of Koyayaghi as suggested by Ohkado in order to uniquely specify a collaboration session. One would be motivated to combine these teachings because it would allow for management of which participants belong to which sessions.

Regarding claim 5, Kobayaghi does not the real-time web sharing system as set forth in claim 2, wherein said server comprises a storing means to store identification information, which identifies said terminals individually, in association with the update information and part update information sent from the individual terminals corresponding to the identification information, a means to, when receiving a connection request which requests a connection from a prescribed terminal to another terminal, transmit said connection request to such another terminal, a means to, when receiving from said another terminal a notification that said another terminal is ready to respond to the connection request, retrieve from said storing means the update information and part update information associated with the identification information of said prescribed terminal, or a means to first transmit said retrieved update information and then transmit said retrieved part update information to said prescribed terminal.

Ohkado teaches wherein said server comprises

a storing means to store identification information, which identifies said terminals individually, in association with the update information and part update information sent from the individual terminals corresponding to the identification information [0117];

a means to, when receiving a connection request which requests a connection from a prescribed terminal to another terminal, transmit said connection request to such another terminal [0164];

a means to, when receiving from said another terminal a notification that said another terminal is ready to respond to the connection request [0165], retrieve from said storing means the update information and part update information associated with the identification information of said prescribed terminal [0167]; and

a means to first transmit said retrieved update information and then transmit said retrieved part update information to said prescribed terminal [0170].

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an assigned ID in the system/method of Koyayaghi as suggested by Ohkado in order to uniquely specify a collaboration session. One would be motivated to combine these teachings because it would allow for management of which participants belong to which sessions.

Regarding claim 6, Kobayaghi teaches the real-time web sharing system as set forth in claim 1, wherein said server comprises

Art Unit: 2451

a means to transmit a pointer script which incorporates tags (<DIV>) for displaying a pointer to be shared on the web page between the terminals (column 6 lines 49-52) and which obtains the movement location for the pointer (column 6 lines 58-59), and a moving script which moves the pointer (column 6 lines 54-57); and

a means to transmit the location information which notifies the movement location for the pointer on the web page, such information being sent from the prescribed terminal, to other terminals which are displaying the same web page as said prescribed terminal (column 5 lines 50-54); and

said terminals (user machine) each comprises

a means to receive the pointer script and location information which are sent from said server (column 6 lines 4-5);

a means to cause said pointer script to incorporate the tags for sharing the pointer into the web page (column 5 lines 28-32), obtain the location of the pointer after movement (column 7 lines 13-15), and transmit to said server the location information which notifies the location thus obtained (column 6 lines 51-52); and

a means to cause said moving script to move the pointer on the web page based on said received location information (column 5 lines 33-34).

Regarding claim 7, Kobayaghi teaches a terminal of a real-time web sharing system which enables real-time sharing of a web page via a remote server, comprising:

a means to receive a detecting script which detects an update to the web page (A PageController detects changes in a page element, column 2 lines 16-17) and an

Art Unit: 2451

updating script which updates the web page (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20) from a server (a Embedder that embeds in each page a PageManager for controlling pages, column 2 lines 10-11) and update information which indicates contents of updating to the web page (communicates them to another machine by way of a Page Communicator, column 2 lines 17-18);

a means to cause said received detecting script to detect an update to the web page being displayed and, if any, generate update information which indicates contents of updating to the web page and to transmit the update information (column 2 lines 16-18); and

a means to cause the updating script to update the web page based on the update information which has been received via said receiving means (column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide

Art Unit: 2451

centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

However, Kobayaghi-Ohkado do not explicitly disclose inserting said scripts into said web page on said terminal.

Narin teaches inserting scripts into a web page on a terminal (the script wrapper 197 is provided as a separate file, and thus the browser downloads the set of scripting instructions contained in the script wrapper 197 and incorporates them into the script as if originally embedded in the HTML document, column 13 lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize providing the scripts as a separate file in the system/method of Kobayaghi-Ohkado as suggested by Narin in order to allow script to be written without regard to different browser brands. One would be motivated to combine these teachings because a script wrapper increases the efficient use of computing resources.

Regarding claim 8, Kobayaghi teaches the terminal of a real-time web sharing system as set forth in claim 7, wherein

said terminal comprises

a means to receive an update detecting script (column 3 lines 46-51) which detects an update to a part provided on said web page (column 2 lines 16-17), an incorporating script which incorporates this update detecting script into the web page (column 6 lines 4-5), and a part updating script which updates a part provided on the

Art Unit: 2451

web page (column 2 lines 18-20), all of these scripts being sent from a server (column 2 lines 10-11);

a means to cause the incorporating script to incorporate said update detecting script into the web page (column 3 lines 58-59), cause said update detecting script to detect an update to a part on said web page (column 2 lines 16-17), and to generate and transmit part update information which notifies the content of the update (column 2 lines 17-18); and

a means to cause said part updating script to update the part provided on the web page based on said received part update information (column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

Art Unit: 2451

Regarding claim 9, Kobayaghi teaches the terminal of a real-time web sharing system as set forth in claim 8, wherein

an update to a part provided on said web page

is a scroll or resize of said web page or an update of a value in the entry form on said web page (column 2 lines 20-23).

Regarding claim 10, Kobayaghi teaches the terminal of a real-time web sharing system as set forth in claim 8, wherein

said terminal comprises

a means to receive a pointer script, to be sent from said server (column 5 lines 45-49), which incorporates tags (<DIV>) for displaying a pointer to be shared on the web page between the terminals (column 5 lines 17-20) and which obtains the movement location for the pointer (column 6 lines 49-53), a moving script which moves the pointer (column 6 lines 58-60), and location information which notifies the movement location for the pointer on the web page (column 7 lines 13-15);

a means to cause said pointer script to incorporate the tags (<DIV>) for sharing the pointer into the web page (column 5 lines 23-27), obtain the location information for the pointer after movement (column 7 lines 13-15), and transmit the location information which notifies the location thus obtained (column 6 lines 47-48); and

a means to cause said moving script to move the pointer on the web page based on said received location information (column 7 lines 13-15).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

Regarding claim 17, Kobayaghi teaches a method of sharing in real-time a web page being displayed on a first terminal and a second terminal via a remote server, comprising the steps of:

said server transmitting to the first terminal only a detecting script which detects an update to a web page (A PageManager monitors a state of each page element in a page, column 2 lines 45-46) and transmitting to said second terminal only an updating script which updates a web page (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20) (Embedder that embeds in each page a PageManager for controlling pages. The plural user

Art Unit: 2451

machines to be shared comprise an existing Web browser capable of running Java and Script, and PageManager embedded in each page, column 2 lines 10-14);

said first terminal receiving the detecting script and causing this received detecting script to detect an update to a web page (A PageController detects changes in a page element, column 2 lines 16-17);

said second terminal receiving the updating script (user machines to be shared comprise an existing Web browser capable of running Java and Script, and PageManager embedded in each page, column 2 lines 12-14);

said first terminal, if said detecting script detects an update to a web page, generating and transmitting update information which indicates contents of updating to said web page (PageController detects changes in a page element, communicates them to another machine by way of a PageCommunicator, column 2 lines 16-18);

transmitting only the update information sent from the first terminal to the second terminal (communicates them to another machine by way of a PageCommunicator, column 2 lines 16-18); and

said second terminal causing said updating script to update the web page based on the update information (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser,

Art Unit: 2451

the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

However, Kobayaghi-Ohkado do not explicitly disclose inserting said scripts into said web page on said terminals.

Narin teaches terminals inserting scripts into a web page on said terminals (the script wrapper 197 is provided as a separate file, and thus the browser downloads the set of scripting instructions contained in the script wrapper 197 and incorporates them into the script as if originally embedded in the HTML document, column 13 lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize providing the scripts as a separate file in the system/method of Kobayaghi-Ohkado as suggested by Narin in order to allow script to be written without regard to different browser brands. One would be motivated to combine these teachings because a script wrapper increases the efficient use of computing resources.

Regarding claim 18, Kobayaghi teaches the real-time web sharing method as set forth in claim 17, comprising the steps of:

said server transmitting to the first terminal an update detecting script which detects an update to a part (element) provided on a web page (column 2 lines 14-17) and an incorporating script which incorporates this update detecting script into the web page (column 2 lines 10-11) and transmitting to the second terminal an updating script which updates a web page (column 2 lines 18-20);

said first terminal receiving the detecting script (column 5 lines 45-50) and incorporating script sent from said server (column 6 lines 4-5);

said second terminal receiving the updating script sent from said server (column 2 line 14);

said first terminal causing said received incorporating script to incorporate said update detecting script into said web page (column 6 lines 4-5);

said first terminal, if the update detecting script detects an update to said part provided on the web page, generating and transmitting part update information which notifies the content of this update (column 2 lines 16-18);

transmitting the part update information sent from said first terminal to the second terminal (column 2 lines 17-18); and

said second terminal causing said received updating script to update the part provided on the web page based on the part update information which has been sent (column 2 lines 18-20).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated to combine these teachings because in doing so the system will perform more efficiently.

Regarding claim 20, Kobayaghi does not explicitly disclose the real-time web sharing method as set forth in claim 17, comprising the steps of said first terminal detecting that a Connect button which calls said second terminal has been pressed, said first terminal, when said Connect button is pressed, notifying said server a connection request which requests a connection with said second terminal, said server, when receiving the notification of the connection request from said first terminal, transmitting this notification to second terminal, said second terminal, when receiving the notification of the connection request from said server, enabling a Respond button which responds to this connection request and detecting the pressing of said Respond button, said second terminal, when detecting the pressing of said Respond button, notifying said server that the terminal is ready to respond to the connection request, said server, when receiving

Art Unit: 2451

the notification from said second terminal that the terminal is ready to respond to the connection request, retrieving the update information and part update information associated with the identification information of said first terminal, said server first transmitting said retrieved update information and then transmitting said retrieved part update information or said second terminal first updating the web page and then updating the part on the web page, based on the update information and part update information, respectively, sent from said server.

Ohkado teaches the steps of:

said first terminal (customer) detecting that a Connect button (call button) which calls said second terminal (agent) has been pressed [0159];

said first terminal (customer), when said Connect button is pressed, notifying said server a connection request which requests a connection with said second terminal (agent) [0164];

said server, when receiving the notification of the connection request from said first terminal, transmitting this notification to second terminal [0165];

said second terminal (agent), when receiving the notification of the connection request from said server, enabling a Respond button (log-on button) which responds to this connection request and detecting the pressing of said Respond button [0150];

said second terminal, when detecting the pressing of said Respond button, notifying said server that the terminal is ready to respond to the connection request [0154];

said server, when receiving the notification from said second terminal that the terminal is ready to respond to the connection request [0165], retrieving the update information and part update information associated with the identification information of said first terminal [0039];

said server first transmitting said retrieved update information and then transmitting said retrieved part update information [0040]; and

said second terminal first updating the web page and then updating the part on the web page, based on the update information and part update information, respectively, sent from said server [0041].

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an assigned ID in the system/method of Koyayaghi as suggested by Ohkado in order to uniquely specify a collaboration session. One would be motivated to combine these teachings because it would allow for management of which participants belong to which sessions.

Regarding claim 21, Kobayaghi teaches the real-time web sharing method as set forth in claim 17, comprising the steps of:

said server transmitting a pointer script, which incorporates tags (<DIV>) for displaying a pointer to be shared (remote pointer) on the web page between the terminals (column 5 lines 23-27) and which obtains the movement location for the pointer, and a moving script which moves the pointer (column 5 lines 33-34);

said first terminal receiving the pointer script (column 6 lines 49-51);

Art Unit: 2451

said second terminal receiving the moving script (column 6 lines 51-52);

said first terminal causing said received pointer script to incorporate the tags (DIV) of the pointer to be shared between the terminals into said web page (column 6 lines 52-57);

said first terminal causing said pointer script to obtain the movement location for said pointer (column 6 lines 58-59) and transmit the location information thus obtained (column 2 lines 16-18);

forwarding the location information sent from said first terminal to said second terminal (column 4 lines 6-9); and

said second terminal causing said moving script to move the pointer being displayed on said web page, based on the location information sent (column 7 lines 13-15).

However, Kobayaghi does not explicitly disclose that the terminals communicate with each other through a server.

Ohkado teaches terminals communicate with each other through a server (when a change in the page is detected either in the customer browser or in the agent browser, the applet is activated, the changed page information is sent to an applet of the other party with which the collaboration is executed via a collaboration server, [0009]).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize the collaborating terminals communicating via a collaboration server in the system/method of Kobayaghi as suggested by Ohkado in order to provide centralized control and management of the communications. One would be motivated

Art Unit: 2451

to combine these teachings because in doing so the system will perform more efficiently.

11. Claims 11 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkado in view of Kobayaghi in further view of Narin.

Regarding claim 11, Ohkado teaches a server of a system which enables sharing of a web page being viewed between a plurality of terminals in real-time, comprising:

a means to receive update information which indicates an update of said web page sent from a prescribed terminal (notifies the other party of a loading start state, [0177]);

a storing means to store identification information which identifies said prescribed terminal, in association with said received update information (session management table 210, [0167]);

a means to cause said storing means to store said identification information which identifies said prescribed terminal, in association with said update information (records the UAs of the agent and the customer in the unused entry, [0167]) ;

a means to, when another terminal logs in using the identification information of said prescribed terminal, retrieve from said storing means the update information and part update information associated with the identification information that is the same as said identification information used for the login (when a page for instructing the log-on

Art Unit: 2451

is displayed, an APPLET tag for embedding a page representative applet P exists in the page, and thus the applet P, communication related class and a tree manager 177 are acquired from the collaboration server 110, [0137]); and

a means to first transmit only said retrieved update information to said another terminal (notifies the other party of a loading start state, [0177]).

However, Ohkado does not explicitly disclose a means to transmit to a terminal only a detecting script which detects an update to the web page and an updating script which updates the web page or part update information.

Kobayaghi teaches a means to transmit (Embedder that embeds in each page a PageManager for controlling pages, column 2 lines 10-11) to a terminal only a detecting script which detects an update to a web page (PageController detects changes in a page element, column 2 lines 16-17) and an updating script which updates the web page (receives changes in a page of another computer and then reflects the same changes to own page element, column 2 lines 18-20); and

part update information which identifies an update of a part provided on a web page (column 2 lines 16-18); and

a means to transmit only said part update information to said another terminal (column 2 lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize communicating the changes of elements in a web page in the system/method of Ohkado as suggested by Kobayaghi in order to reduce the amount of data that must be transmitted in order for the terminals to synchronize. One

Art Unit: 2451

would be motivated to combine these teachings because only sending particular elements that change in a page would improve the use of bandwidth and resources.

However, Ohkado-Kobayaghi do not explicitly disclose inserting said scripts into said web page on each of said terminals.

Narin teaches terminals inserting scripts into a web page on each of said terminals (the script wrapper 197 is provided as a separate file, and thus the browser downloads the set of scripting instructions contained in the script wrapper 197 and incorporates them into the script as if originally embedded in the HTML document, column 13 lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize providing the scripts as a separate file in the system/method of Ohkado-Kobayaghi as suggested by Narin in order to allow script to be written without regard to different browser brands. One would be motivated to combine these teachings because a script wrapper increases the efficient use of computing resources.

Regarding claim 12, Ohkado teaches the server of a real-time web sharing system as set forth in claim 11, wherein said server comprises

a means to, when receiving a connection request which requests a connection from a prescribed terminal to another terminal, transmit said connection request to such another terminal [0115];

a means to, when receiving from said another terminal a notification that said another terminal is ready to respond to the connection request [0115], retrieve from said

Art Unit: 2451

storing means the update information and part update information associated with the identification information of said prescribed terminal [0117]; and

a means to first transmit said retrieved update information to said prescribed terminal [0177].

However, although Ohkado teaches a change in a page [0009], Ohkado does not explicitly disclose part update information.

Kobayaghi teaches a means to transmit received part update information to said other terminal (column 2 lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize communicating the changes of elements in a web page in the system/method of Ohkado as suggested by Kobayaghi in order to reduce the amount of data that must be transmitted in order for the terminals to synchronize. One would be motivated to combine these teachings because only sending particular elements that change in a page would improve the use of bandwidth and resources.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayaghi-Ohkado-Narin in view of Kim et al. (US 2003/0105819).

Regarding claim 19, Kobayaghi does not explicitly disclose the real-time web sharing method as set forth in claim 18, comprising using a plurality of terminals and having the steps of said server storing the identification information of said first terminal in

Art Unit: 2451

association with said received update information and part update information, said other terminal logging into said server using the same identification information as the identification information of said first terminal, said server retrieving the update information and part update information associated with the same identification information as the said login identification information, said server first transmitting said retrieved update information and then transmitting said retrieved part update information, or said other terminal first updating the web page and then updating the part on the web page, based on the update information and part update information, respectively, sent from said server.

Ohkado teaches using a plurality of terminals [0004]; and

having the steps of:

said server storing the identification information of said first terminal in association with said received update information and part update information [0167];

said other terminal logging into said server using the same identification information as the identification information of said first terminal [0004];

said server retrieving the update information and part update information associated with the same identification information as the said login identification information [0167];

said server first transmitting said retrieved update information and then transmitting said retrieved part update information [0177];

and said other terminal first updating the web page and then updating the part on the web page, based on the update information and part update information [0041], respectively, sent from said server [0040].

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to utilize an assigned ID in the system/method of Koyayaghi as suggested by Ohkado in order to uniquely specify a collaboration session. One would be motivated to combine these teachings because it would allow for management of which participants belong to which sessions.

However, Kobayaghi-Ohkado-Narin do not explicitly disclose a third terminal.

Kim teaches a third terminal (103, 104, and 105 of FIG. 1).

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to recognize that a third terminal could be included in the system/method of Kobayaghi-Ohkado-Narin as suggested by Kim given the teaching of Kobayaghi-Ohkado-Narin that a plurality of terminals may collaborate. One would be motivated to combine these teachings because allowing for additional terminals to be incorporated in the system expands the possible uses for the system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2451

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MADHU WOOLCOCK whose telephone number is (571)270-3629. The examiner can normally be reached on Monday-Thursday 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2451

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W./
Examiner, Art Unit 2451

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451